



P.B.5818 - Patentlaan 2
2280 HV Rijswijk (ZH)
☎ +31 70 340 2040
TX 31651 epo nl
FAX +31 70 340 3016

Europäisches
Patentamt

Zweigstelle
in Den Haag
Recherchen-
abteilung

European
Patent Office

Branch at
The Hague
Search
division

Office européen
des brevets

Département à
La Haye
Division de la
recherche

Wörz, Volker Alfred
Dreiss, Fuhlendorf,
Steimle & Becker
Patentanwälte
Gerokstrasse 6,
Postfach 10 37 62
70188 Stuttgart
ALLEMAGNE

Eingang bei ZPL

12. DEZ. 2003

Term.
Bearb.

Eingegangen

1 1. AUG. 2003

Dreiss Patentanwälte

Datum/Date

07.08.03

Zeichen/Ref./Réf.

01380182EP

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

03290496.3-1233-

Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire

EVOLIUM S.A.S.

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☒ title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

1

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 426 641 A (AFRASHTEH ALIREZA ET AL) 20 June 1995 (1995-06-20)	1,2,4-18	H03F1/30 H03F1/02
A	* column 15, line 16 - column 17, line 29; figures 2,3 *	3	

X	US 6 351 189 B1 (HIRVILAMPI MIKA) 26 February 2002 (2002-02-26)	1,2,4-18	
A	* column 6, line 54 - column 12, line 56; figures 4-6 *	3	

X	EP 1 026 822 A (NOKIA MOBILE PHONES LTD) 9 August 2000 (2000-08-09)	1,2,4-18	
A	* column 11, line 48 - column 13, line 40; figures 5,6 *	3	

A	EP 1 134 890 A (ECI TELECOM LTD) 19 September 2001 (2001-09-19) * page 4, line 38 - page 5, line 11; figures 3,4 *	1-18	

			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H03F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23 July 2003	Examiner Fedi, G
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 29 0496

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-07-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5426641	A	20-06-1995	NONE		
US 6351189	B1	26-02-2002	AU	6937301 A	13-02-2002
			WO	0211279 A2	07-02-2002
EP 1026822	A	09-08-2000	FI	990202 A	04-08-2000
			EP	1026822 A2	09-08-2000
EP 1134890	A	19-09-2001	EP	1134890 A1	19-09-2001



This application is covered by the extended European search report pilot project at present running within the European Patent Office, applied to all European patent applications filed as first filing and searched on or after 01.07.03. Under this project the EPO issues together with the search report an opinion on whether the application and the invention to which it relates meet the requirements of the EPC. This non-binding opinion is issued free of charge as a service. This opinion may be used as the basis for an informed decision as to whether it is desired to pursue the application further or not.

For further details of this pilot project, the applicant's attention is directed to the Official Journal edition 5/2003. If any further immediate questions or comments arise the EPO Customer Services: +31-70-340 4500 or +49-89-2399 2828 can be contacted.

The attached opinion reveals that the application or the invention to which it relates appear not to meet the requirements of the Convention (see comments on enclosed Form 2906).

If the applicant wishes to continue with this application the examination fee must be paid. Where appropriate amendments can be filed to address the objections raised in the opinion, thus shortening the overall procedure. If no amendments are filed, the opinion will be re-issued as the first official communication under Article 96(2) and Rule 51(2) EPC.

If the examination fee has already been paid and the right to the communication under Article 96(1) EPC has been waived for this application, the first official communication under Article 96(2) and Rule 51(2) EPC will be issued promptly.



The examination is being carried out on the **following application documents**:

Text for the Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI SK TR LI RO

Description, pages:

1-7 as originally filed

Claims, No.:

1-18 as originally filed

Drawings, sheets:

1/2-2/2 as originally filed

The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: US-A-5 426 641 (AFRASHTEH ALIREZA ET AL) 20 June 1995 (1995-06-20)

D2: US-B1-6 351 189 (HIRVILAMPI MIKA) 26 February 2002 (2002-02-26)

D3: EP-A-1 026 822 (NOKIA MOBILE PHONES LTD) 9 August 2000 (2000-08-09)

1. The present application does not meet the requirements of Article 52(1) EPC, because the subject-matter of independent claims 1 and 12 is not new in the sense of Article 54(1) and (2) EPC. Reasons are given in the following:

1.1 Claim 1: The document D1 discloses in Fig. 2 (the references in parentheses applying to this document):

Method for controlling the operating point of a transistor of a power amplifier (203) for amplifying time division multiplex access TDMA-signals, comprising the steps of:

-detecting a deviation between a set operating point and an actual operating point of said transistor (210, 211 and see description, column 16, lines 3-11); and

-adjusting the bias of the gate/base of said transistor (203) according to said deviation in order to re-establish said set operating point (204),

wherein at least one of these steps is carried out during at least one null power time slot of said TDMA-signals (see fig.3 and the description, column 16, lines 60-62).



It must be noted that the subject matter of claim 1 is also disclosed by document D2 (see Fig. 4 to 6) and D3 (see Fig. 5 and 6).

Therefore independent claim 1 lacks novelty (Article 54 (1) and (2) EPC).

1.2 Claim 12: The subject matter of claim 12 constitutes the apparatus implementation of the method defined in claim 1, hence document D1 (or D2 or D3, see point 1.1 above) discloses all the features of claim 12.

Therefore independent claims 12 lacks novelty (Article 54 (1) and (2) EPC).

1.3 Furthermore it seems that the subject matter of this application is more suitable to be defined in terms of method steps and any definition in terms of apparatus features will not lead to new and inventive subject matter.

2. Dependent claims 2,4,5,6,7,13-18 do not meet the requirements of the EPC with respect to novelty, because all the additional features of these dependent claims are disclosed by D1 or by D2 or by D3 (see for instance the description of document D1, column 5, line 16 to column 17, line 29 and element 210 in Fig.2 and the timing diagram which is shown in Fig. 3).

Therefore dependent claims 2,4,5,6,7,13-18 lack novelty (Art. 33 (2) PCT).

3. Claims 8-11: the additional features of dependent claims 8-11 constitute matter of normal design procedure, i.e. the choice of the null power time slot or the implementation as computer program of the method. The skilled person would implement such features in the bias circuit of D1, which is considered to represent the closest prior art for these claims, in order to solve the known problem posed of reducing instability and increasing the reliability of the biasing procedure. Therefore claims 8-11 lack an inventive step (Article 52(1) and 56 EPC).

4. It seems that the additional features of dependent claim 3 are neither disclosed nor suggested by the prior art. It is suggested to the applicant to reformulate them as a new independent claim, taking into account that any other amendments would also be carefully examined.

The applicant should also indicate in the letter of reply the difference of the subject-matter of the new independent claim vis-à-vis the state of the art and the significance thereof. In particular the inventive concept solved by the independent claim to be filed with said letter should be discussed.

5. In case the applicant wishes to proceed with the present application, the opportunity



should be taken to consider the following outstanding matters:

5.1. To meet the requirements of Rule 27(1)(b) EPC, document D1 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

5.2 The description should be harmonized with the new definition of the invention according to the new independent claim to be filed (Rule 27(1)(c) EPC).

5.3. The new independent claim to be filed should be cast in the two part form with respect to D1 (Rule 29 (1) EPC).

If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefore should be provided in the letter of reply. In the latter case, the applicant should ensure that it is clear from the description which features of the subject matter of independent claims are known from the document D1.

5.4. In order to facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based.

If the applicant regards it as appropriate these indications could be submitted in handwritten form on a copy of the relevant parts of the application as filed.